

What is claimed is:

1           1.       A zoom lens comprising: a first lens group having a negative refractive power as a  
2 whole, a second lens group having a positive refractive power as a whole, and a third lens group  
3 having a positive refractive power as a whole, arranged in said order from object side to image  
4 side, for zooming from a wide-angle end to a telephoto end as well as for correcting image surface  
5 changes required in accordance with said zooming by means of moving said second lens group and  
6 said third lens group from image side to object side; wherein  
7           said first lens group consists of a lens having a negative refractive power and a prism for  
8 changing a light path arranged in said order from the object side.

1           2.       A zoom lens claimed in claim 1 wherein,  
2 said second lens group consists of a lens having a positive refractive power; and  
3 an aperture stop is provided between said second lens group and said third lens group.

1           3.       A zoom lens claimed in claim 1 wherein,  
2 said first lens group's lens has an aspherical surface.

1           4.       A zoom lens claimed in claim 3 wherein,  
2 said aspherical surface is formed on a surface with a smaller curvature radius.

1           5.       A zoom lens claimed in claim 4 wherein,

2 said aspherical surface is formed to have a weaker negative refractive power weakening toward its  
3 periphery.

1           6.       A zoom lens claimed in claim 1 wherein,  
2 said third lens group has at least one lens with a positive refractive power and at least one lens with  
3 a negative refractive power.

1           7.       A zoom lens claimed in claim 6 wherein,  
2 said third lens group has a lens at a position closest to the object having a positive refractive power  
3 and an aspherical surface at least on one side.

1           8.       A zoom lens claimed in claim 1 wherein,  
2 the prism of said first lens group is formed to have an entrance surface and an exit surface both  
3 oblong in a direction perpendicular to a plane that includes an entrance axis and an exit axis.

1           9.       A zoom lens claimed in claim 1 that satisfies the following equations (1) and (2):

2           (1)        $0.25 < |f_w/f_1| < 0.7$ , and

3           (2)        $v_1 > 40$ ,

4           where  $f_1$ : focal length of the first lens group,

5                    $f_w$ : focal length of the total lens system at the wide-angle end, and

6                    $v_1$ : Abbe number of the first lens group's lens

1           10.     A zoom lens claimed in claim 1 wherein,  
2     said first, second, and third lens groups are all made of resin materials.

1           11.     A zoom lens claimed in claim 2 wherein,  
2     said first lens group's lens has an aspherical surface.

1           12.     A zoom lens claimed in claim 2 wherein,  
2     said third lens group has at least one lens with a positive refractive power and at least one lens with  
3     a negative refractive power.

1           13.     A zoom lens claimed in claim 3 wherein,  
2     said third lens group has at least one lens with a positive refractive power and at least one lens with  
3     a negative refractive power.

1           14.     A zoom lens claimed in claim 2 wherein,  
2     the prism of said first lens group is formed to have an entrance surface and an exit surface both  
3     oblong in a direction perpendicular to a plane that includes an entrance axis and an exit axis.

1           15.     A zoom lens claimed in claim 3 wherein,  
2     the prism of said first lens group is formed to have an entrance surface and an exit surface both  
3     oblong in a direction perpendicular to a plane that includes an entrance axis and an exit axis.

1           16.     A zoom lens claimed in claim 2 that satisfies the following equations (1) and (2):

2           (1)      $0.25 < |f_w/f_1| < 0.7$ , and

3           (2)      $v_1 > 40$ ,

4           where  $f_1$ : focal length of the first lens group,

5                     $f_w$ : focal length of the total lens system at the wide-angle end, and

6                            $v_1$ : Abbe number of the first lens group's lens

1           17.     A zoom lens claimed in claim 3 that satisfies the following equations (1) and (2):

2           (1)      $0.25 < |f_w/f_1| < 0.7$ , and

3           (2)      $v_1 > 40$ ,

4           where  $f_1$ : focal length of the first lens group,

5                     $f_w$ : focal length of the total lens system at the wide-angle end, and

6                            $v_1$ : Abbe number of the first lens group's lens

1           18.     A zoom lens claimed in claim 9 wherein,

2           said first, second, and third lens groups are all made of resin materials.

1